

DaimlerChrysler AG

Patent claims

5 1. A headlight unit for a motor vehicle, in particular a passenger car, having a housing (2) which can be fixed to a vehicle body (3) and in which at least one light source (5) is arranged, a heat-conducting device (14) being provided which is coupled,  
10 so as to transmit heat, at one end with an input end section (15) to the at least one light source (5) and/or to a reflector (11) associated with the at least one light source (5) and is passed out of the housing (2) at the other end with an output end section (16)  
15 and can be connected, so as to transmit heat, to a zone (17), which is suitable for conducting heat, of the vehicle body (3).

2. The headlight unit as claimed in claim 1,  
20 characterized  
in that the heat-conducting device (14) extends up to the output end section (16) within the housing (2).

3. The headlight unit as claimed in claim 1 or 2,  
25 characterized  
in that the heat-conducting device (14) has a stationary section (18), which has the output end section (16) and is arranged in the housing (2) such that it is fixed in position, and a flexible section  
30 (19), which has the input end section (15), is connected to the stationary section (18) so as to transmit heat and can be carried along with relative movements between the at least one light source (5) and/or the reflector (11) on the one hand and the  
35 housing (2) on the other hand.

4. The headlight unit as claimed in claim 3,  
characterized

in that the flexible section (19) has at least one elastic strip or a knitted or multi-component strip.

5     5.    The headlight unit as claimed in claim 3 or 4,  
characterized  
in that the stationary section (18) has at least one strip (20) which is connected to the flexible section (19) so as to transmit heat, a frame part (13), which is connected to the strip (20) so as to transmit heat,  
10   of the housing (2) and at least one lug (21), which is connected to the frame part (13) so as to transmit heat, the lug (21) being passed out of the housing (2) and forming or having the outlet end section (16).

15   6.    The headlight unit as claimed in claim 5,  
characterized  
in that the housing (2) is held on the vehicle body (3) by means of the at least one lug (21) when the headlight unit has been installed.

20   7.    The headlight unit as claimed in one of claims 3 to 6,  
characterized  
in that the at least one light source (5) and/or the  
25   reflector (11) are held and/or mounted in the housing (2) such that they can be adjusted and such that  
-    a cornering light can be realized which follows the steering angle of the vehicle and/or  
-    a change to the inclination, which compensates for  
30   the inclination of the vehicle with respect to the roadway, or a headlight beam adjustment can be realized, and/or  
-    an adjustment of the range illuminated by the headlight unit (1) can be realized.

35   8.    The headlight unit as claimed in one of claims 1 to 7,  
characterized

in that the heat-conducting device (14) is made of metal, in particular copper.

9. The headlight unit as claimed in one of claims 1  
5 to 8,  
characterized  
in that the input end section (15) is connected, so as  
to transmit heat, to a mount (6), to which the at least  
one light source (5) is fitted such that the input end  
10 section (15) is coupled indirectly to the at least one  
light source (5) via the mount (6) so as to transmit  
heat.

10. The headlight unit as claimed in one of claims 1  
15 to 9,  
characterized  
in that the housing (2) is designed to be thermally  
insulating.